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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/364,835	07/30/1999	BAIJU V. PATEL	INTL-0182-US	9974

7590 02/17/2005

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EXAMINER	
HA, LEYNNA A	

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/364,835	PATEL ET AL.	
	Examiner	Art Unit	
	LEYNNA T. HA	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,13-20 and 27-37* is/are pending in the application.

4a) Of the above claim(s) *8-12 and 21-26* is/are ~~withdrawn from consideration~~ cancelled.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,13-20 and 27-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-7, 13-20, and 27 have been re-examined. Applicant has cancelled claims 8-12 and 21-26 and added new claims 28-37.

2. Claims 1-7, 13-20, and 27 remains rejected under 35 U.S.C. 102(b).

Claims 28-37 are rejected under 35 U.S.C. 102(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless –*
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 13-20, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Abadi, Et Al. (US 5,268,962).

As per claim 1:

Abadi discloses a method for use in a device coupled to a communications channel, comprising:

determining a security service to perform with a data block; **(see col.3, lines 61-65 and col.4, lines 24-27; security service is the type of security rendered for the data**

packet prior to transmitting the packet to the host/destination. Adadi determines the security measure needed for the packet according to the other host by identifying the encryption key needed to encrypt the data packet and its destination so that the packet will transmit to the proper host that can decrypt the packet.)

generating security information to pass along with the data block, the security information identifying the security service; and **(see col.4, lines 28-68 and col.8, line 60 thru col.9, line 4; security information contained in the packet header includes key location, encrypted key value, key for encryption/decryption, and destination address, all of these information identifies the security service of the data packet)**

processing, in a computer peripheral device adapted to the communication with the communications channel, the data block according to the security information; **(see col.4, line 64 - col.5, line 33; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface.)**

As per claim 2: see col.3, lines 61-65 and col.4, lines 24-27 (security service is the type of security rendered for the data packet prior to transmitting the packet to the host/destination. Adadi determines the security measure needed for the packet according to the other host by identifying the encryption key needed to encrypt the data packet and its destination so that the packet will transmit to the proper host that can decrypt the packet); discusses performing cryptographic processing of the data block.

As per claim 3: see col.6, lines 7-63 and FIG.3; discusses receiving the data block from a software routine and routing the processed data block back to the software routine after processing.

As per claim 4: **see col.7, line 63 – col.9, line 3;** discusses determining if the security service can be performed by the computer peripheral device and if not, processing the data block according to the security service in a software routine instead of the computer peripheral device.

As per claim 5: **see col.3, lines 55-65;** discussing the Internet Protocol Security.

As per claim 6:

Abadi discloses a method for use in a device including a computer peripheral device adapted to control communication with a transport medium, comprising **(FIG.3 and FIG.5b)**:

receiving data from a routine in the device; **(see col.4, lines 47-58 and col.5, lines 52-55)**

sending the data to the computer peripheral device to perform cryptographic processing. **(See col.5, lines 30-31 and col.6, lines 25-40 and 67-68; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface and cryptographic processing is the process of encryption or decryption.)**

As per claim 7: **see col.5, lines 1-33;** discusses sending the data to the computer peripheral device at least one more time to perform further cryptographic processing.

As per claim 13:

Abadi discloses an article including a machine-readable storage medium containing instructions for execution in a system including a computer peripheral device adapted to control communication with a communications channel, the instructions when executed causing the system to: **(see FIG.3)**

receive a data block from the computer peripheral device; **(see col.5, lines 52-55)**

determine from information in the data block if a security service has not been performed on the data block by the computer peripheral device; and

(see col.3, lines 61-65 and col.4, lines 24-27; security service is the type of security rendered for the data packet prior to transmitting the packet to the host/destination. Abadi determines the security measure needed for the packet according to the other host by identifying the encryption key needed to encrypt the data packet and its destination so that the packet will transmit to the proper host that can decrypt the packet.)

process the data block if the security service has not been performed on the data block by the computer peripheral device. **(See col.4, lines 30-31 and col.6, lines 67-68; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface and cryptographic processing is the process of encryption or decryption.)**

As per claim 14: see col.7, line 63 – col.9, line 3; discussing the instructions causing the system to retrieve security information associated with the data block and sent the data block and security information to the computer peripheral device to perform the security service.

As per claim 15: see col.6, lines 7-63; discussing the instructions causing the system to perform the security service on the data block.

As per claim 16:

Abadi discusses a controller for controlling communications with a transport medium **(see FIG.3)**, the controller comprising:

a receiving circuit to receive data and associated security control information, the security control information identifying a security service to be performed on the data; and **(see col.3, lines 61-65, col.4, lines 24-27 and col.5, lines 46-55; security service is the type of security rendered for the data packet prior to transmitting the packet to the host/destination. Adadi determines the security measure needed for the packet according to the other host by identifying the encryption key needed to encrypt the data packet and its destination so that the packet will transmit to the proper host that can decrypt the packet.)**

a cryptographic engine to cryptographically process the data based on the security control information, the cryptographic engine being in the computer peripheral device.

(See col.4, lines 30-31 and col.6, lines 67-68; the network controller 116 is considered as the claimed computer peripheral device because it is a computer component connected to the host computer D via the DMA interface and cryptographic processing is the process of encryption or decryption.)

As per claim 17: Abadi discusses the storage device containing information identifying security services to be performed **(see col.3, lines 61-65 and col.4, lines 10-27)**, the received security control information selecting a portion of the security

services information in the storage device **(see col.8 lines 3-44)**, wherein the cryptographic engine processes the data according to the selected portion of the security services information. **(see col.5, lines 7-33 and col.9, lines 5-15)**

As per claim 18: **see col.8, lines 36-51;** discussing a device adapted to change the contents of the storage device to update the security services information. **[it is inherent in the art that updating to make sure the system doesn't have outdated or unnecessary data and updating inherently helps the security of a system operate more efficiently.]**

As per claim 19: **see col.8, lines 36-51;** discussing a device adapted the security services information based on a predetermined replacement policy.

[it is inherent in the art that a replacement policy ensures the system doesn't have outdated or unnecessary data that would cause the system to slow down or takes longer period of time to process and because a replacement policy inherently further helps the security of a system.]

As per claim 20: **see col.8, lines 5-44;** discussing the security services information includes security association information.

As per claim 27: **see col.6, lines 25-46 and FIG.6;** discusses a cryptographic engine to perform cryptographic processing on the received data.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 28-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Caputo, et al. (US 5,546,463).

As per claim 28:

Caputo discloses a method for use in a device coupled to a communications chnnnel, comprising:

determining a security service to perform with a data block; **[see col.6, lines 18-33]**

generating security information to pass along with the data block, the security information identifying at least one of an encryption algorithm **[see col.5, lines 44-50]** and an authentication algorithm **[see col.6, lines 7-16]** to be performed by the security service; and **[see col.4, lines 30-44]**

processing, in a computer peripheral device adapted to control communication with the communications chnnnel, the data block according to the security information. **[see col.2, lines 20-63]**

As per claim 29: **see col.5, lines 21-23;** discusses the processing includes performing cryptographic processing of the data block.

As per claim 30: **see col. 8, lines 47-54;** discusses receiving the data block from a software routine and routing the processed data block back to the software routine after processing.

As per claim 31: Caputo discloses a the method of claim 28, further comprising:

determining if the security service can be performed by the computer peripheral device; and **[see col.6, lines 18-51]**

if not, processing the data block according to the security service in a software routine instead of the computer peripheral device. **[see col.8, lines 47-54]**

As per claim 32: **see col., lines ;** discusses identifying a security service according to an Internet Protocol security protocol.

As per claim 33:

Caputo discloses a controller for controlling communications with a transport medium, the controller comprising:

a receiving circuit to receive data **[see col.5, lines 11-15 and col.8, lines 10-16]** and associated security control information, the security control information identifying at least one of an encryption algorithm **[see col.5, lines 44-50]** and an authentication algorithm **[see col.6, lines 7-16]** to be performed on the data; and **[see col.4, lines 30-44]**

a cryptographic engine to cryptographically process the data based on the security control information, the cryptographic engine being a computer peripheral device. **[see col.2, lines 20-63 and col.5, lines 17-24]**

As per claim 34: **see col.5, lines 19-20;** discusses a storage device containing information identifying security services to be performed, the received security control information selecting a portion of the security services information in the storage device, wherein the cryptopaphic engine processes the data according to the selected portion of the security services information.

As per claim 35: **see col.7, lines 20-25 and 45-47;** discusses a device adapted to change the contents of the storage device to update the security services information. **[it is inherent in the art that updating to make sure the system doesn't have outdated or unnecessary data and updating inherently helps the security of a system and to operate more efficiently]**

As per claim 36: **see col.7, lines 20-25 and 45-47;** discusses the device is adapted to update the security services information based on a predetermined replacement policy. **[it is inherent in the art that a replacement policy to makes sure the system doesn't have outdated or unnecessary data that would cause the system to slow down or takes longer period of time to process and because a replacement policy inherently further helps the security of a system]**

As per claim 37: **see col.5, lines 44-50 and col.6, lines 7-16 ;** discusses the security services information includes security association information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LHa

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100